

Claim Amendments

1. (currently amended) A line card for a telecommunications system comprising:
a multiple mode circuit capable of supporting symmetric and asymmetric telecommunication services;

wherein the multiple mode circuit comprises:

a POTS interface for supporting POTS service; and

an xDSL interface for supporting symmetric and asymmetric xDSL services;

wherein the multiple mode circuit selects whether to support the POTS and asymmetric digital subscriber line services or whether to support the digital subscriber line services;

wherein the multiple mode circuit receives a communication signal;

wherein the multiple mode circuit separates and processes POTS signals and asymmetric digital subscriber line signals in the communication signal if POTS and asymmetric digital subscriber line services are being supported;

wherein the multiple mode circuit separates and processes digital subscriber line signals in the communication signal if symmetric and asymmetric digital subscriber line services are being supported.

2. (canceled)

3. (previously presented) The line card as recited in claim 1 wherein the xDSL interface is capable of supporting any one of asymmetric digital subscriber line service, asymmetric digital subscriber line lite service, very high speed digital subscriber line service, symmetric digital subscriber line service, high bit rate digital subscriber line service, single pair symmetric digital subscriber line service, HDSL2 and SHDSL.

4. (canceled)

5. (previously presented) The line card as recited in claim 1 wherein the multiple mode circuit substantially concomitantly supports POTS service and asymmetric digital subscriber line services.

6. (original) The line card as recited in claim 5 wherein the xDSL interface is capable of supporting any one of asymmetric digital subscriber line service, asymmetric digital subscriber line lite service and very high speed digital subscriber line service.

7. (original) The line card as recited in claim 1 wherein the multiple mode circuit comprises:

an automatic mode circuit which substantially automatically determines which symmetric and asymmetric services should be supported.

8. (previously presented) The line card as recited in claim 7 wherein the automatic mode circuit comprises:

a controller for receiving instructions regarding the services being supported and for controlling the multiple mode circuit based on the instructions.

9. (original) The line card as recited in claim 8 wherein the controller receives the instructions from external devices.

10. (original) The line card as recited in claim 7 wherein the controller is capable of changing the services being supported during a communication session.

11. (original) The line card as recited in claim 10 wherein the controller changes the services being supported during a communication session based on information received via a handshake signal.

12. (original) The line card as recited in claim 7 wherein the automatic mode circuit comprises a controller for monitoring the multiple mode circuit, for determining which one of the services should be supported based on operation of the multiple mode circuit, and for instructing the multiple mode circuit to support the one of the services.

13. (currently amended) A line card for a telecommunications system comprising:
a multiple mode circuit capable of supporting POTS service, symmetric digital subscriber
line services and asymmetric digital subscriber line services;

wherein the multiple mode circuit selects whether to support the POTS and asymmetric
digital subscriber line services or whether to support the digital subscriber line services;

wherein the multiple mode circuit receives a communication signal;

wherein the multiple mode circuit separates and processes POTS signals and asymmetric
digital subscriber line signals in the communication signal if POTS and asymmetric digital
subscriber line services are being supported;

wherein the multiple mode circuit separates and processes digital subscriber line signals
in the communication signal if symmetric and asymmetric digital subscriber line services are
being supported.

14. (original) The line card as recited in claim 13 wherein the multiple mode circuit is
capable of supporting the POTS service substantially concomitant with at least one of the digital
subscriber line services.

15. (original) The line card as recited in claim 14 wherein the at least one of the digital
subscriber line services is any one of asymmetric digital subscriber line service, asymmetric
digital subscriber line lite service and very high speed digital subscriber line service.

16. (original) The line card as recited in claim 13 wherein the multiple mode circuit is
capable of supporting symmetric digital subscriber line services.

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17.(original) The line card as recited in claim 16 wherein the symmetric digital subscriber line services is any one of high bit rate digital subscriber line service and single pair symmetric digital subscriber line service.

18. (original) A method for supporting POTS and asymmetric digital subscriber line services and symmetric digital subscriber line services on a line card comprising the steps of:

selecting whether to support the POTS and asymmetric digital subscriber line services or whether to support the digital subscriber line services;

receiving a communication signal at the line card;

if POTS and asymmetric digital subscriber line services are being supported, separate POTS signals and asymmetric digital subscriber line signals in the communication signal;

process the POTS and asymmetric digital subscriber line signals;

if symmetric and asymmetric digital subscriber line services are being supported, separate digital subscriber line signals in the communication signal; and

process the digital subscriber line signals.

19. (original) The method as recited in claim 18 wherein the step of selecting whether to support comprises the step of:

receiving instructions from an external device regarding which of the POTS and asymmetric digital subscriber line services or which of the symmetric or asymmetric digital subscriber line services to support.

20. (original) The method as recited in claim 19 wherein the step of receiving instructions comprises the step of:

receiving the instructions in a handshake signal.

21. (original) The method as recited in claim 20 wherein the step of receiving the instructions comprises the step of:

receiving the instructions in a handshake signal during a communication session.

22. (original) The method as recited in claim 18 wherein the step of selecting whether to support comprises the steps of:

monitoring operation of the line card; and

selecting whether to support POTS and asymmetric digital subscriber line services or whether to support symmetric digital subscriber line services based on the operation of the line card.

23. (original) The method as recited in claim 18 wherein the asymmetric digital subscriber line service comprises any one of asymmetric digital subscriber line service, asymmetric digital subscriber line lite service and very high speed digital subscriber line service.

24. (original) The method as recited in claim 18 wherein the symmetric digital subscriber line services comprises any one of high bit rate digital subscriber line service and single pair symmetric digital subscriber line service.

25. (previously presented) The line card for the telecommunications system of claim 1, wherein the xDSL interface comprises a central office controller, a transmit xDSL branch, and a receive xDSL branch;

wherein the central office controller controls the transmit xDSL branch and the receive xDSL branch to support the symmetric and asymmetric xDSL services.

26. (previously presented) The line card for the telecommunications system of claim 25, wherein the transmit xDSL branch comprises a transmit xDSL digital signal processor, a transmit xDSL digital-to-analog converter, and a transmit xDSL band limiting filter;

wherein the receive xDSL branch comprises a signal splitter, a receive high pass filter, a receive xDSL band limiting filter, a receive xDSL analog-to-digital converter, and a receive xDSL digital signal processor.